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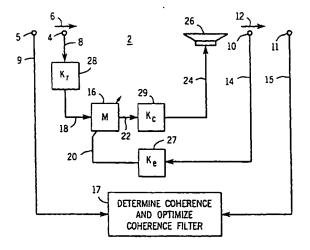
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## (54) Coherence optimized active adaptive control system

(57) Coherence optimization is provided in an active adaptive control system. The adaptive control model (16) has a model input (18) receiving a reference signal (8) from a reference input transducer (4), an error input (20) receiving an error signal (14) from an error transducer (10), and a model output (22) outputting a correction signal (24) to an output transducer (26) to introduce

a control signal matching the system input signal (6) to minimize the error at the error input. Coherence in the system is determined, and a coherence filter (27; 28: 29) is provided according to the determined coherence. Preferably, one or more of the error signal (14), reference signal (8) and correction signal (24) is coherence filtered.

FIG. 1





## **EUROPEAN SEARCH REPORT**

EP 95 30 3452

Category	Citation of document with of relevant p	indication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IntCL6)
(		TSUSHITA ELECTRIC IND CO	-	G10K11/178
(		<b>}</b> -	4,6 7-9, 12-49	i,
), γ	US 4 677 677 A (ER 1987 * column 1, line 5	IKSSON LARRY J) 30 June	4,6	
, A	US 5 347 586 A (HII September 1994 * column 9, line 18	LL PETER D ET AL) 13	1	
	10 June 1986	RCONNAT MICHEL ET AL) 7 - column 2, line 35 *	1	
				TECHNICAL FIELDS SEARCHED (Int.Cl.6)
	The present search report has b	neen drawn up for all claims:		
Place of search Date of completion of the search				Exception
THE HAGUE		29 August 1997	Swai	rtjes, H
X : gart Y : gart	CATEGORY OF CITED DOCUME including relevant if taken alone including relevant if combined with an iment of the same category	NTS T: theory or principl E: earlier parent doo siter the filling da	e underlying the ument, but public te the application	inventiun